

Title (en)

Process for producing cell having high productivity of protein and process for preparing protein by using the cell.

Title (de)

Verfahren zur Herstellung einer Zelle mit hoher Produktivität an Protein und Verfahren zur Herstellung von Protein unter Verwendung dieser Zelle.

Title (fr)

Procédé de production d'une cellule à haute productivité de protéine et procédé de préparation de protéine en utilisant cette cellule.

Publication

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Application

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Priority

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Abstract (en)

A process for producing a cell having a high productivity of a desired protein, which comprises (1) transfecting a higher eucaryotic cell which contains a chromosomal DNA coding for dihydrofolate reductase sensitive to methotrexate and functions normally with a gene I coding for a desired protein, a gene II coding for dihydrofolate reductase from a wild type cell and a gene III coding for a protein necessary for the selection of a transformant, and (2) culturing the transformant in the presence of a competitive inhibitor to the dihydrofolate reductase activity to amplify the gene I together with the amplification of the gene II, and a process for preparing a desired protein by culturing the thus obtained cell having a high productivity of a desired protein. According to the present invention, a desired protein can be prepared stably in a large amount by culturing the transformant in a medium containing MTX even though the transformant contains normal DHFR gene in chromosomal DNA.

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